



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/638,397

08/12/2003

Lin-Wei Chang

CHAN3216/EM

5472

23364 7590 12/26/2007
BACON & THOMAS, PLLC
625 SLATERS LANE
FOURTH FLOOR
ALEXANDRIA, VA 22314

EXAMINER

KOSOWSKI, ALEXANDER J

ART UNIT

PAPER NUMBER

2125

MAIL DATE

DELIVERY MODE

12/26/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/638,397

Applicant(s)

CHANG, LIN-WEI

Examiner

Alexander J. Kosowski

Art Unit

2125

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

- 1) Claims 1-3 are presented for examination.

Claim Rejections - 35 USC § 103

- 2) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

- 3) Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Larabell et al (U.S. Pat 5,641,296), further in view of Yen-Kuang (U.S. Pat 6,515,855).

Referring to claim 1, Larabell teaches a mechanism for rapidly installing and detaching a hard disk (Abstract), comprising: a U-shaped handle pivotally mounted at both sides of the hard disk, the handle having a width slightly larger than that of the hard disk (Figure 1 and col. 3 lines 12-16), the handle including a latch in a forward side (Figure 1 item #41 and col. 6 lines 41-43); and a frame for receiving the hard disk (Figure 1 item #22), whereby, while pivoting the handle down into a gap between the hard disk and the frame, the latch of the handle is engaged with the frame enabling the sides of the hard disk to urge against the frame and the handle for fastening the hard disk in the frame (col. 6 lines 25-43, whereby the handle is rotated down to engage the frame and secure the drive). However, Larabell does not explicitly teach the frame including an elastic member in a forward end, the elastic member including a projection on a side, the projection being adapted to engage with the latch.

Yen-Kuang teaches a mechanism for detaching hard disks (Abstract), which utilizes a handle which pivots to secure the disk to a frame (col. 3 lines 11-41 and Figure 2), whereby an

elastic member with a projection is adapted to engage with a latch on the handle to secure the handle (Figure 2 and col. 4 lines 43-53).

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to utilize an elastic member in a forward end including a projection adapted to engage with a latch in the mechanism taught by Larabell above since the use of such a latch would hold a handle in place to prevent the handle from being unintentionally moved and the data storage device from being unintentionally removed from a frame (Yen-Kuang, col. 4 lines 43-53).

Referring to claim 3, Larabell teaches the above. However, Larabell does not explicitly teach a groove around the projection of the frame, the groove being operative to confine the projection of the frame therein.

Yen-Kuang teaches a mechanism for detaching hard disks (Abstract), which has an elastic member with a projection that inside a groove that is adapted to engage with a latch on the handle to secure the handle (Figure 2 and col. 4 lines 43-53, whereby item #6 shows a groove around the projection).

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to utilize a groove operative to confine the projection of the frame therein in the mechanism taught by Larabell above since the use of a latch mounted in a groove would hold a handle in place to prevent the handle from being unintentionally moved and the data storage device from being unintentionally removed from a frame (Yen-Kuang, col. 4 lines 43-53).

4) Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Larabell et al (U.S. Pat 5,641,296), further in view of Yen-Kuang (U.S. Pat 6,515,855), further in view of Chang (U.S. Pat 5,947,575).

Referring to claim 2, Larabell and Yen-Kuang teach the above. However, they do not explicitly teach two abutment plates coupled to pivot points of the handle and the hard disk, wherein both ends of the handle are pivotally coupled at a gap between the sides of the hard disk and the abutment plates so that the handle is protected by the abutment plates when the handle contacts a foreign object.

Chang teaches a removable hard disk mechanism which comprises abutment plates allowing a handle to pivot in a gap between the plates and the sides of a disk drive (Figure 2 item #22 and col. 3 lines 5-10).

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to utilize abutment plates as described in Change in the invention taught above since these would help aid in alignment during entry and withdrawal of the disk (Chang, col. 4 lines 30-35, whereby examiner notes such an abutment would also protect the handle pivot points from damage).

Conclusion

5) The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Park (U.S. Pat 5,924,782) – teaches computer with latching handle.

Chen et al (U.S. Pat 6,556,432) - teaches a pivoting fastener for drives.

Siahpolo et al (U.S. Pat 5,481,431) – teaches a u-shaped drive handle.

Application/Control Number:
10/638,397
Art Unit: 2125

Page 5

Tucker et al (U.S. Pat 6,625,014) – teaches a method for mounting drives.

6) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander J Kosowski whose telephone number is 571-272-3744.

The examiner can normally be reached on Monday through Friday, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on 571-272-3749. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. In addition, the examiner's RightFAX number is 571-273-3744.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2100.

Alexander J. Kosowski
Primary Examiner
Art Unit 2125



Alexander Kosowski
Primary Examiner
TC2100